**UIP Ethernet**

UIPEthernetClass has access as well to methods in UIPUDP class (Friend)

**// Start / Stop transmission:**

**Function: begin(16\_bit\_int)**

description: Takes port number to initialize

return: 1 if successful and 0 if not

parameters: 16\_bit\_int -> port number

**Function: stop():**

description: Close opened socket

return: None

parameters: None

**// Sending packets:**

**Function: beginPacket(IpAddress, 16\_bit\_int)** -> multiple versions available

description: Start building packet

return: Returns 1 if successful, 0 if there was a problem

parameters: IpAddress, 16\_bit\_int -> port

**Function: write(uint8\_t \*, size\_t)** -> multiple versions available

description: Write bytes from buffer into the packet

return: Returns size of bytes if successful, 0 if there was a problem

parameters: 8\_bit\_int -> buffer location , size\_t -> size of bytes

**Function: endPacket()**

description: Finish off this packet and send it

return: Returns 1 if successfully, 0 if there was an error

parameters: None

**// Receiving Packets:**

**Function: parsePacket()**

description: Start processing the next available incoming packet

return: Returns the size of the packet in bytes, or 0 if no packets are available

parameters: None

**Function: available()**

description: Number of bytes remaining in the current packet

return: Returns the number

parameters: None

**Function: read(char\* buffer, size\_t len)** -> multiple versions available

description: Read up to len bytes from the current packet and place them into buffer

return: Returns the number of bytes read, or 0 if none are available

parameters: char\* -> buffer pointer, size\_t -> number of bytes to read

**Function: peek():**

description: Return the next byte from the current packet without moving on to the next byte

return: Byte read or -1 if none

parameters: None

**Function: flush():**

description: Finish reading the current packet

return: None

parameters: None

**// Others:**

**Function: remoteIP():**

description: Return the IP address of the host who sent the current incoming packet

return: IpAddress

parameters: None

**Function: remotePort():**

description: Return the port of the host who sent the current incoming packet

return: 16\_bit\_int -> port

parameters: None